

9097250 TOSHIBA (DISCRETE/OPTO)

67C 09312 DT-07-19

Silicon Epitaxial Planar Type

Variable Capacitance Diode

**1S2236**

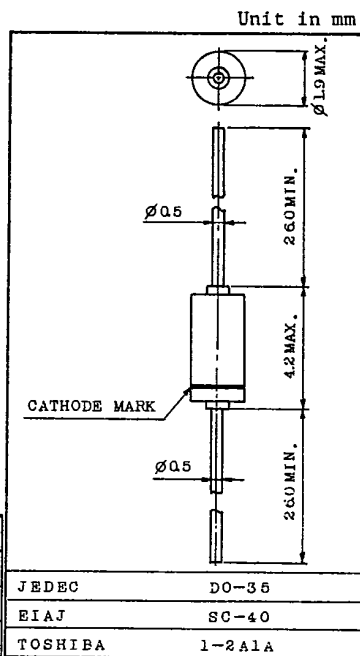
AFC APPLICATION FOR FM RECEIVER.

## FEATURES:

- High Q :  $Q=70(\text{Min.})$  ( $f=50\text{MHz}$ )
- Low Reverse Current :  $I_R=100\text{nA}(\text{Max.})$  ( $V_R=4\text{V}$ )

MAXIMUM RATINGS ( $T_a=25^\circ\text{C}$ )

| CHARACTERISTIC            | SYMBOL    | RATING    | UNIT             |
|---------------------------|-----------|-----------|------------------|
| Reverse Voltage           | $V_R$     | 15        | V                |
| Junction Temperature      | $T_j$     | 150       | $^\circ\text{C}$ |
| Storage Temperature Range | $T_{stg}$ | -55 ~ 150 | $^\circ\text{C}$ |



Weight : 0.14g

ELECTRICAL CHARACTERISTICS ( $T_a=25^\circ\text{C}$ )

| CHARACTERISTIC    | SYMBOL | TEST CONDITION                  | MIN.  | TYP. | MAX.  | UNIT |
|-------------------|--------|---------------------------------|-------|------|-------|------|
| Reverse Current   | $I_R$  | $V_R=4\text{V}$                 | -     | -    | 100   | nA   |
| Total Capacitance | $C_T$  | $V_R=4\text{V}, f=1\text{MHz}$  | 7     | -    | 14    | pF   |
| Capacitance Ratio | K      | (Note)                          | 0.210 | -    | 0.500 |      |
| Figure of Merit   | Q      | $V_R=4\text{V}, f=50\text{MHz}$ | 70    | 120  | -     |      |

Note :  $K = \frac{C_T(@V_R=2\text{V}, f=1\text{MHz}) - C_T(@V_R=4\text{V}, f=1\text{MHz})}{C_T(@V_R=4\text{V}, f=1\text{MHz})}$

TOSHIBA CORPORATION

9097250 TOSHIBA (DISCRETE/OPTO)

67C 09313

D T-07-19

1S2236

